SECTION 235113.16 - VENT DAMPERS

Revise this Section by deleting and inserting text to meet Project-specific requirements.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1. GENERAL
	* + 1. RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

* + - * 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
			1. SUMMARY
				1. Section Includes:

Barometric dampers.

Vent dampers.

* + - 1. SUBMITTALS
				1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Product Data: For each type of product.
				5. Shop Drawings: For each type of product.

Include plans, elevations, sections, and attachment details.

Include diagrams for power, signal, and control wiring.

* + - * 1. Sample Warranty: For special warranty.
			1. CLOSEOUT SUBMITTALS
				1. Operation and Maintenance Data: For draft control devices to include in emergency, operation, and maintenance manuals.
			2. WARRANTY

When warranties are required, verify with Director’s Representative's counsel that special warranties stated in this article are not less than remedies available to Director’s Representative under prevailing local laws.

* + - * 1. Special Warranty: Manufacturer agrees to repair or replace components of [**barometric dampers**] [**vent dampers**] that fail in materials or workmanship within specified warranty period.

Failure includes failure due to corrosion.

Verify available warranties and warranty periods for units and components.

Warranty Period: [**Two**] [**10**] <**Insert number**> years from date of Substantial Completion.

1. PRODUCTS

Manufacturers and products listed in SpecAgent and Masterworks Paragraph Builder are neither recommended nor endorsed by the AIA or Deltek. Before inserting names, verify that manufacturers and products listed there comply with requirements retained or revised in descriptions and are both available and suitable for the intended applications. For definitions of terms and requirements for Contractor's product selection, see Section 016000 "Product Requirements."

* + - 1. BAROMETRIC DAMPERS

* + - * 1. [Manufacturers:](http://www.specagent.com/Lookup?ulid=6188) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[ENERVEX Inc](http://www.specagent.com/Lookup?uid=123456961991).

[FAMCO](http://www.specagent.com/Lookup?uid=123456961974).

[Field Controls L.L.C](http://www.specagent.com/Lookup?uid=123456961992).

[Quickdraft](http://www.specagent.com/Lookup?uid=123456961976).

[Snappy Air Distribution Products](http://www.specagent.com/Lookup?uid=123456961985).

[Tjernlund Products, Inc](http://www.specagent.com/Lookup?uid=123456961983).

Approved equivalent.

* + - * 1. Damper Construction: High-temperature-enamel-painted steel damper and housing with galvanized-steel breeching connection. Adjustable counterweight with lock. Include knife-edge bearings that do not require lubrication.
			1. VENT DAMPERS

* + - * 1. [Manufacturers:](http://www.specagent.com/Lookup?ulid=6189) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Field Controls L.L.C](http://www.specagent.com/Lookup?uid=123456961987).

[Johnson Controls, Inc](http://www.specagent.com/Lookup?uid=123456961989).

Approved equivalent.

* + - * 1. Damper Construction: Stainless-steel damper blade, shaft, and vent pipe with metal, prelubricated bearings.

Electric motor sized to power damper open and closed in approximately 15 seconds in each direction. Power is off when damper is at rest.

Comply with ANSI Z21.66.

* + - * 1. Controls:

Control transformer.

Keyed wiring harness.

Damper end switch to prove damper is open.

Interlock with boiler to permit burner operation when damper is open.

Hold-open switch for troubleshooting boiler controls.

* + - 1. MOTORS

Default motor characteristics are specified in Section 230513 "Common Motor Requirements for HVAC Equipment."

* + - * 1. Comply with NEMA designation, temperature rating, service factor, and efficiency requirements for motors specified in Section 230513 "Common Motor Requirements for HVAC Equipment."
			1. CAPACITIES AND CHARACTERISTICS

If Project has more than one damper, delete "Damper" paragraph below and schedule dampers on Drawings.

* + - * 1. Damper:

Manufacturer: <**Insert manufacturer**>.

Model No.: <**Insert number**>.

Rated Appliance Input: <**Insert Btu/h**>.

Vent Size: <**Insert inches**>.

Electrical Characteristics:

Motor Horsepower: <**Insert value**>.

Volts: [**115**] <**Insert value**>.

Phase: Single.

Hertz: 60.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

1. EXECUTION
	* + 1. INSTALLATION
				1. Install listed components in a manner complying with the listing.
				2. Secure barometric dampers to breechings with hardware compatible with connected materials.
				3. Locate barometric and motorized vent dampers as close to draft hood collar as possible.
				4. Secure barometric and motorized vent dampers to appliances, breechings, or chimneys with hardware compatible with connected materials.
			2. CONNECTIONS
				1. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."
				2. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

END OF SECTION 235113.16